Introduction: More than any other Canadian province, Newfoundland and Labrador (NL) relies on provisionally licensed international medical graduates (PLIMGs) to provide primary health care, particularly in rural communities. However, turnover among PLIMGs is high, and this is expensive and disruptive to the populations they serve.

Methods: We developed and analyzed a database that allowed us to quantify the turnover among PLIMGs and also to determine the Canadian destinations of PLIMGs who cease practising in NL.

Results: We found that about 1 in 5 PLIMGs remain in province for a period of 5 years and that those who emigrate within Canada are most likely to go to Ontario. Many PLIMGs cannot be tracked after they leave the province.

Conclusion: We speculate that many PLIMGs are moving on to the more lucrative US market.

Introduction: Terre-Neuve-et-Labrador (T.-N.-L.) dépend plus que toutes les autres provinces canadiennes des diplômés de facultés de médecine étrangères autorisés sous permis provisoire (DFMEPP) pour offrir des soins de santé primaires à ses citoyens, surtout dans les collectivités rurales. Cependant, le roulement du personnel est élevé parmi ces diplômés, situation qui coûte cher et qui a un effet perturbateur sur les résidents de ces collectivités.

Méthodes: Nous avons conçu une base de données et en avons fait l’analyse. Elle nous a permis de quantifier le roulement des DFMEPP et de connaître l’emplacement de ceux qui ont arrêté de pratiquer la médecine à T.-N.-L.


Conclusion: Nous supposons que plusieurs DFMEPP se déplacent vers les États-Unis, dont le marché est plus lucratif que celui du Canada.
inclined to relocate compared with their fully licensed counterparts. In the decade between 1994 and 2003, interprovincial migration among fully licensed physicians was about 2% per year.²

This tendency to relocate results in an expensive ongoing need to recruit physicians. Furthermore, given that there is a well-established link between continuity of care and patient satisfaction, individuals residing in rural and remote communities may have systematically lower levels of satisfaction with their providers simply because they are unable to develop and maintain long-term relationships with their family physicians.³,⁴

Physicians typically practise under a provisional licence if they are deemed to have the necessary qualifications and training, but lack the service time to be certified by a Canadian college. Full licensure requires certification from a national college such as the College of Family Physicians of Canada (CFPC). The CFPC typically requires 2 years of practice in Canada and the successful completion of a series of examinations before it allows entry into the college and thus an opportunity to practise anywhere in Canada. As such, most PLIMGs seek a full licence and will work toward this end while in provisional practice. The anecdotal evidence suggests that upon entry into a Canadian college, the former PLIMG will resign from practice in rural NL and take up practice in another Canadian province.

Our paper has 2 broad aims. We seek to develop a better understanding of the retention of PLIMGs in NL and to find out what becomes of those who leave provisional practice in NL.

METHODS

A database of PLIMGs who practised in NL from 1995 to 2004 was developed for tracking their movements within Canada through to 2006. (This database was provided by the Newfoundland and Labrador College of Physicians and Surgeons.) Postal codes were recorded as listed in the relevant 12 years (1995–2006) of the Canadian Medical Directories.⁵ Once this database was completed we were able to track all PLIMGs during their time in practice in NL and identified the postal code to which they relocated if they left the province.

RESULTS

There were 1176 PLIMGs who practised in NL from 1995 to 2006. Table 1 displays the number of PLIMGs working in the province each year and the number of new PLIMGs who entered the province each year.

The data as described above are organized into annual cohorts of the number of PLIMGs who were new to practice in NL each year. We then examined where they were in the years that followed. Essentially, from year to year a physician can fall into 1 of 3 categories. They can

• remain in practice in NL (under provisional or full licence);
• relocate to practise in another Canadian province;
• cease practising medicine in Canada.

Figure 1 shows the retention rates of PLIMGs by year of practice.

Given that this analysis covers an 11-year period, it is important to examine how retention changed over this timeframe. Figure 2 shows 1-, 2- and 3-year retention rates separated by cohort.

A final objective of this analysis was to examine what happens to PLIMGs after they cease practising

<table>
<thead>
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<th>Year</th>
<th>No. of PLIMGs practising in NL</th>
<th>No. of new PLIMGs practising in NL</th>
</tr>
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<tbody>
<tr>
<td>1995*</td>
<td>162</td>
<td>—</td>
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<tr>
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<td>166</td>
<td>38</td>
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<td>32</td>
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<tr>
<td>2005</td>
<td>185</td>
<td>28</td>
</tr>
</tbody>
</table>

PLIMG = provisionally licensed international medical graduate.
*For 1995 we were able to determine how many PLIMGs were practising in NL, but we were unable to determine how long they were in practice in the province at that time.

Fig. 1. Retention of provisionally licensed international medical graduates by years of practice in Newfoundland and Labrador.
in NL. The initial results revealed that we are not able to track most PLIMGs after their departure from NL. Just over 61% of those who practise as PLIMGs cannot be tracked using the annual Canadian Medical Directory.\(^5\) Note that the directories only include physicians practising under a full licence. This raises a number of possibilities. They may have

- given up practising medicine;
- continued practising medicine under a provisional licence in another province;
- continued to practise medicine in another country.

Interprovincial migration of PLIMGs is also of interest. There is some concern that NL is effectively screening IMGs for other (wealthier) parts of Canada. Figure 3 shows the provinces to which PLIMGs have migrated after becoming fellows of a Canadian medical college.

A review of the 205 cases of interprovincial migration identified in the database showed that 180 (87.8%) moved to urban locations when they left NL, suggesting a loss of rural physicians. (Urban areas are defined as those locations with the second character of the postal code being “0.”)

**DISCUSSION**

Physician recruitment and retention has been an ongoing concern in NL. The 11-year trends suggest that low rates of retention are an important phenomenon. Many rural communities will have gaps in coverage, with those in need of medical services having to travel long distances to receive treatment.

Figure 1 indicates that the most rapid fall-off of PLIMGs leaving the province is after the second year, which coincides with the standard contractual term for most PLIMGs practising family medicine in NL. It also coincides with the length of time needed to be in Canadian practice to qualify to write the examinations for entry into the Canadian College of Family Physicians.

Figure 2 demonstrates that 1-year PLIMG retention has improved in recent years; however, this is offset by a decline in 2- and 3-year retention, respectively. This suggests that PLIMGs are seeing through their (typical) 2-year contracts and then leaving. It appears PLIMGs are not becoming more likely to stay in NL on a long-term basis.

Given the salary differentials for physicians as compared with most other occupations, and given the number of years invested in their education and practice, it is unlikely that they would give up practising medicine, and it seems rather more likely that they have taken up provisional practice elsewhere or have emigrated from Canada. The latter is a particularly interesting prospect, since many countries (including the United States) treat certification from a Canadian medical college as equivalent to passing their own and as such these individuals are able to practise without restriction. It may be that the many PLIMGs are using their time in NL as a stepping stone to the more lucrative US market.

Which provinces tend to benefit the most from PLIMG migration from NL? Figure 3 demonstrates that the most common Canadian province for PLIMG migration is Ontario. This is not surprising since Ontario is the largest Canadian province, and physicians in Ontario tend to be better compensated than those in NL. Furthermore, many urban centres in Ontario have much more ethnic diversity than rural NL and, therefore, it is not surprising that physicians would seek to live in communities where they have access to more individuals from culturally similar backgrounds.

Almost 21% of physicians migrating out of NL take up practice in Nova Scotia. We find this surprising because compensation for physicians in Nova Scotia is not as lucrative as many other parts.
of Canada. Nor does Nova Scotia have a large immigrant population into which the PLIMG could easily assimilate.

Reliance on PLIMGs to provide primary health care in rural NL has become a costly but necessary reality. Many rural and remote communities see the local family doctor as a temporary position and seek stability. As the market for physicians becomes increasingly global, the opportunities for those practising in rural and remote locations will expand, making retention more difficult. As noted above, it is also a concern that NL is screening physicians for subsequent migration, with those who have successfully gained entry into a Canadian college tending to migrate on and those who have not remaining in practice in NL.

CONCLUSION

Increasing the supply of Canadian-trained physicians to rural communities is a process that will take several years to implement. However, better retention of new physician recruits is critical in alleviating the ongoing problem of high turnover. More study is needed to determine the factors associated with successful retention of PLIMGs in rural and remote communities in NL. Particular emphasis should examine what role specific institutions (the provincial department of health and community services, the provincial medical association, regional health authorities and educators) can play in terms of providing the necessary support to PLIMGs. In addition, finding better initial matches — recruiting people who are more likely to stay — will result in lower turnover. Identifying characteristics (both of the physician and the community) that help predict better matches is an avenue of research that should be extended. In addition, effectively promoting rural practice among Canadian medical graduates will reduce the need for Canadian communities to rely on PLIMGs.

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Les médecins s’expriment

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